

1. (Currently Amended) A blood purification device comprising: ~~[[;]]~~  
a blood circuit having an arterial blood circuit and a venous blood circuit;  
a blood pump disposed in said arterial blood circuit;  
a blood purifier connected to the blood circuit between said arterial blood circuit and said venous blood circuit, and ~~purifies the~~ configured to purify blood flowing in said blood circuit;  
a first measuring ~~[[means]]~~ unit disposed in said arterial blood circuit ~~for measuring the and~~ configured to measure a blood concentration of said arterial blood circuit;  
~~[[to]]~~ a second measuring ~~means that is~~ unit disposed in said venous blood circuit ~~for measuring and configured to measure~~ a blood concentration of said venous blood circuit;  
a calculating ~~means that calculates~~ unit configured to calculate a measurement value and a theoretical value, the measurement value referring to a ratio of said blood concentrations measured by said first measuring ~~[[means]]~~ unit and said second measuring ~~[[means]]~~ unit, and the theoretical value referring to a blood concentration ratio ~~as a theoretical value~~ obtained by designated at least one formula ~~[[using]]~~ based on parameters including a preset blood flow rate of ~~[[a]]~~ said blood pump and ~~[[said]]~~ a preset blood purifying rate of said blood purifier ~~as parameters; and~~  
an evaluation ~~means, for evaluating~~ unit configured to evaluate whether said ~~blood concentration ratio obtained from said calculating means as a measurement value and said blood concentration ratio as a~~ theoretical value are approximately equal, wherein  
said calculating unit performs a calculation in response to a result of evaluation by said evaluation unit to determine a performance of at least one of said blood pump and said blood purifier using said at least one formula.

2. (Currently Amended) The blood ~~purifying means~~ purification device of claim 1,  
wherein: comprising;

said [[a]] blood purifier includes connected between said arterial blood circuit and said  
~~venous blood circuit; and~~ a water removing ~~[[means]]~~ unit connected to said blood purifier ~~for~~  
~~removing and configured to remove~~ water from ~~[[the]]~~ blood flowing in said blood purifier; and

said preset blood purifying rate [[which]] is the same as said a preset water removal rate of  
said water removing ~~[[means]]~~ unit.

3. (Currently Amended) The blood purification device of claim 2, further comprising: ~~[[;]]~~  
a substitution fluid supplying ~~means disposed~~ unit configured to supply a substitution fluid  
into said blood circuit, wherein ~~[[;]]~~

said [[a]] calculating means for calculating said unit configured to calculate a theoretical  
value referring to a ratio of the blood concentrations calculated as a theoretical value obtained by  
the ~~designated at least one~~ formula using ~~said based on parameters including a preset~~ substitution  
fluid supplying rate ~~preset for of~~ said substitution fluid supplying ~~[[means]]~~ unit and a filtration rate  
~~[[for]] of~~ said blood purifier in addition to said preset blood flow rate and said preset water removal  
rate ~~as parameters~~.

4. (Currently Amended) The blood purification device of the claim 1, further comprising:  
~~[[;]]~~

a reporting ~~means for reporting said~~ unit configured to report when a ratio difference  
between said ~~blood concentration as a~~ measurement value and said ~~blood concentration as the~~

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theoretical value, which is evaluated by said evaluation unit, is bigger larger than the designated acceptable number by said evaluation means a predetermined acceptable ratio difference.

5. (Currently Amended) The blood purification device of the claim 2, further comprising:  
[[:]]

a reporting ~~means for reporting said~~ unit configured to report when a ratio difference between said ~~blood concentration as a~~ measurement value and said ~~blood concentration as the~~ theoretical value, which is evaluated by said evaluation unit, is bigger larger than the designated acceptable number by said evaluation means a predetermined acceptable ratio difference.

6. (Currently Amended) The blood purification device of the claim 3, further comprising:  
[[:]]

a reporting ~~means for reporting said~~ unit configured to report when a ratio difference between said ~~blood concentration as a~~ measurement value and said ~~blood concentration as the~~ theoretical value, which is evaluated by said evaluation unit, is bigger larger than the designated acceptable number by said evaluation means a predetermined acceptable ratio difference.

7. (Canceled)